

STN	Asfalty a asfaltové spojivá Stanovenie výtokového času výtokovým viskozimetrom Časť 1: Asfaltové emulzie	STN EN 12846-1 65 7064
------------	---	--

Bitumen and bituminous binders - Determination of efflux time by the efflux viscometer - Part 1: Bituminous emulsions

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/23

Obsahuje: EN 12846-1:2022

Oznámením tejto normy sa ruší
STN EN 12846-1 (65 7064) zo septembra 2011

136385

EUROPEAN STANDARD

EN 12846-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2022

ICS 91.100.50

Supersedes EN 12846-1:2011

English Version

Bitumen and bituminous binders - Determination of efflux time by the efflux viscometer - Part 1: Bituminous emulsions

Bitumes et liants bitumineux - Détermination du temps d'écoulement à l'aide d'un viscosimètre à écoulement - Partie 1 : Émulsions bitumineuses

Bitumen und bitumenhaltige Bindemittel - Bestimmung der Ausflusszeit mittels Ausflussviskosimeter - Teil 1: Bitumenemulsionen

This European Standard was approved by CEN on 21 November 2022.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 12846-1:2022 (E)

Contents		Page
European foreword		3
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Principle	6
5	Reagents and materials	6
6	Apparatus	6
7	Sampling	7
8	Procedure	7
8.1	General	7
8.2	Preparation of apparatus	7
8.3	Measurement	8
9	Expression of results	9
10	Precision	9
10.1	General	9
10.2	Repeatability	9
10.3	Reproducibility	10
11	Test report	10
Bibliography		14

European foreword

This document (EN 12846-1:2022) has been prepared by Technical Committee CEN/TC 336 “Bituminous binders”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2023, and conflicting national standards shall be withdrawn at the latest by June 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12846-1:2011.

EN 12846-1:2022 includes the following significant technical changes with respect to EN 12846-1:2011:

- possibility to use a vegetal oil, requirement on density replaces requirement on viscosity (Clause 5);
- the use of Sa and Sc solutions has been abandoned;
- Figures 1 and 2 have been modified to be in line with the evolution of test equipment (6.1 and 6.2);
- possibility to use alternative working apparatus that meet the requirements of this document, such as for example an integrated block viscometer (6.1);
- mercury stem thermometers are no longer specified as reference thermometers (6.4) and Annex A has been removed;
- emulsion samples, viscometer cups, valves and lids are preconditioned at test temperature to minimize time of presence of the emulsion sample in the viscometer cup (8.3.3 and 8.3.4);
- more accurate description of measurement procedure (8.3);
- introduction in 8.3.9 of the possible use of a balance (alternative method) instead of a receiver (reference method);
- precision data have been re-evaluated based on more comprehensive operational experience (Clause 10).

The EN 12846 series consists of the following parts under the general title *Bitumen and bituminous binders — Determination of efflux time by the efflux viscometer*:

- *Part 1: Bituminous emulsions*;
- *Part 2: Cut-back and fluxed bituminous binders*.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North

EN 12846-1:2022 (E)

Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies a method for the determination of the efflux time at 40 °C of bituminous emulsions in seconds using an efflux viscometer. Alternative test temperature is 50 °C.

NOTE The procedure described in this document can also be followed to determine efflux time at other temperatures such as 25 °C.

WARNING — The use of this document can involve hazardous materials, operations and equipment. This document does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this document to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 58, *Bitumen and bituminous binders — Sampling bituminous binders*

EN 12594, *Bitumen and bituminous binders — Preparation of test samples*

EN 13302, *Bitumen and bituminous binders — Determination of dynamic viscosity of bituminous binder using a rotating spindle apparatus*

EN ISO 4788:2005, *Laboratory glassware — Graduated measuring cylinders (ISO 4788:2005)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN